

ABSTRACT

THESIS: The Relationship Between Fine Temporal Sensitivity and Resting Beta Wave Frequencies

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Various theories and models have been developed to try to explain how people perceive time. Researchers have investigated populations that have temporal deficits, including individuals with Attention Deficit/Hyperactivity Disorder (ADHD), Autism, Schizophrenia, and speech deficits. The current study attempted to find evidence for the Time's Subjective Expansion (TSE) model by investigating the relationship between resting electroencephalogram (EEG) beta brain wave frequencies and performance on a duration discrimination task in a non-clinical population. There was a positive correlation between resting beta wave frequencies and temporal processing accuracy in the left hemispheric posterior parietal region (P3 and PO7). There was also a positive correlation between resting theta wave frequencies and temporal processing accuracy in the left hemispheric temporal region (T7, TP7). These findings provide support for a left hemispheric advantage for temporal processing.